

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Andreas HACHTEL et al
Serial No. : 10/715,531
Filed : November 19, 2003
TC/AU : Unknown
Examiner : Unknown

Docket No. : R.304037
Customer No. : 02119

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date: April 5, 2004

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97(b),
AND EXPLANATION OF THE RELEVANCE OF THE CITED PRIOR ART**

Sir:

The undersigned hereby requests that the prior art cited on the attached prior art statement be placed of record in the application file.

This citation of prior art is made under 37 CFR 1.97(b), since it is being filed before receipt of the first Office action.

The relevance of the prior art cited on the attached form 1449 is as follows:

US 3,415,122

This patent teaches a device in which a ceramic film is used to indicate a maximum temperature. In particular this device is adapted to record the peak temperature reached on any part of the surface or subsurface of a return rocket nose cone.

US 3,768,976

This patent teaches a temperature-time integrating indicator for determining the safe limit of storage of a food product or other material which is subject to deterioration due to temperature and length of storage. In its preferred form the temperature-time integrating indicator comprises a transparent polymeric film package containing a warning message enclosed in the package together with an aqueous solution of a redox dye, e.g., sodium anthraquinone beta-sulfonate. The dye is in its reduced state, which is dark red and obscures the warning message. The rate of permeation of oxygen into the package is a function of the temperature at which the package is exposed to the atmospheric environment. When sufficient time has elapsed at temperatures which may vary, the dye becomes oxidized, turning colorless and revealing the warning message. The effects of temperature and time on the migration of oxygen through the polymeric film followed by reaction of the oxygen with the redox dye in the solution are integrated. This is related to product deterioration in storage, since the rate of this deterioration also depends on the temperature history and the time of storage. The use or disposal of stored foods

and the like may be scheduled in accordance with warnings provided by the temperature-time integrating indicators.

DE 27 48 023 A1

The invention presented in this patent has two capsules of ice, one inside the other. The device is composed of a tight transparent enclosure designed so that the outer ice capsule must initially entirely melt before the inner ice capsule can melt. Further, the inner ice capsule becomes shifted, either a little, or entirely towards the back part of the outer ice if it has melted. One or both of the two ice capsules can be colored so that such a change becomes more visible.

DE 37 37 502 A1

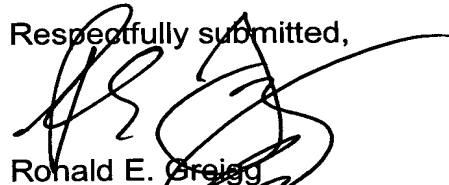
This device teaches a temperature indicator, especially designed for being built into moving components of heat engines, such as gas turbine engines, so that the indicator can determine the operating temperature of the components. The temperature indicator comprises a multi-phase metallic temperature-indicator element, particularly one arranged in a carrier body, which element is composed of a group of granules having individual grains in close structural contact, consisting of a eutectic alloy which experiences an irreversible structure transition upon reaching or exceeding a melting temperature or operating temperature.

WO 00/47964

This device is a temperature history indicator means for affixing to goods. A temperature related phase change in a material within the indicator leads to an indication that a high temperature event has occurred. A preferred format has a water-soluble, lipid-insoluble dye immobilized within a lipid selected to have a melting point at a particular temperature and has all components made from edible materials. Upon melting, the dye dissolves in water present in a secondary phase or into the goods themselves giving a visual indication. Another format has a primary reagent within a solid lipid and a secondary reagent held with a secondary phase such that melting of the lipid allows the primary reagent to react with the secondary reagent, providing an indication of a high temperature event. Time-dependent formats are also considered.

Examination of this application is respectfully requested.

Respectfully submitted,



Ronald E. Greigg
Registration No. 31,517
Attorney for Applicants

GREIGG & GREIGG, PLLC
1423 Powhatan Street, Suite One
Alexandria, VA 22314

Telephone: 703-838-5500
Facsimile: 703-838-5554

REG/SLS/nc
Customer No. 02119

Date: April 12, 2004

A:\IDS, 04-04-03, R304037, Statement under 1.97(b), before 1st OA.wpd

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

APR 12 2004

Docket Number (Optional)

R.304037

Application Number

10/715,531

Applicant(s)

Andreas HACHTEL et al

Filing Date

November 19, 2003

Group Art Unit

2632

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		3,415,122	Dec. 10 68	YEE			April 15, 1963
		3,768,976	Oct. 30 73	HU et al.			May 20, 1971

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		DE 27 48 023 A1	20 July 78	Germany				✓
		DE 37 37 502 A1	19 May 88	Germany				✓
		WO 00/47964	17 Aug. 00	PCT			✓	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.